

WHAT IS CLAIMED IS:

1. A print job management apparatus that manages print jobs, which are executed by a printing device, said print job management apparatus comprising:

5 a job acceptance module that receives each print job with image data;

 a job storage module that has a capacity of storing multiple print jobs received by said job acceptance module;

 a redundant data retrieval module that retrieves
10 redundant image data among image data of print jobs stored in said job storage module; and

 a job status setting module that leaves at least one of the redundant image data retrieved by said redundant data retrieval module while deleting the other of the retrieved
15 redundant image data, and sets a status of a print job in which the image data was deleted, to be executable with remaining image data by the printing device.

2. A print job management apparatus in accordance with claim 1, wherein each print job includes identification
20 information for identifying the image data, and

 said redundant data retrieval module retrieves image data having identical identification information among the image data of the print jobs stored in said job storage module,

as the redundant image data.

3. A print job management apparatus in accordance with claim 2, wherein the identification information includes at least one of a file name of each image data, a size of the image data, identification information for identifying a digital camera used to record the image data, and date of recording the image data with the digital camera.

4. A print job management apparatus in accordance with claim 1, wherein said job status setting module sets the status of the print job in which the image data was deleted, such that the remaining image data among the redundant image data is shared by a print job having the remaining image data and the print job in which the image data was deleted.

5. A print job management apparatus in accordance with claim 4, wherein each print job is executable by the printing device by utilizing reference data, which is generated for reference to image data of the print job in the process of storage into said job storage module, to read the image data stored in said job storage module, and

said job status setting module overwrites reference data of the print job in which the image data was deleted, with reference data of a print job having the remaining image data among the redundant image data.

6. A print job management apparatus in accordance with claim 1, wherein said job status setting module preferentially deletes image data stored earlier in said job storage module, among the redundant image data.

5 7. A print job management apparatus in accordance with claim 1, wherein said job status setting module preferentially deletes printed image data, among the redundant image data.

8. A print job management apparatus in accordance with claim 1, said print job management apparatus further
10 comprising:

an image processing module that makes image data of each print job, which is stored in said job storage module, subjected to a preset series of image processing and thereby converts the image data into print data printable by the printing device,

15 wherein said redundant data retrieval module and said job status setting module respectively execute the retrieval and the deletion and setting the status of the print job, while said image processing module is not activated.

9. A print job management apparatus in accordance with
20 claim 1, said print job management apparatus further comprising:

a job deletion module that deletes a print job stored in said job storage module at a preset timing.

10. A print job management apparatus in accordance with claim 9, wherein the preset timing is any of a timing when a total number of print jobs stored in said job storage module reaches a preset level, a timing when a total storage capacity of print jobs stored in said job storage module reaches a preset
5 volume, and a timing when a duration of storage of each print job stored in said job storage module reaches a preset time period.

11. A print job management apparatus in accordance with
10 claim 9, wherein said job deletion module preferentially deletes a print job stored earlier, among the print jobs stored in said job storage module.

12. A print job management method that manages print jobs, which are executed by a printing device, said print job
15 management method comprising the steps of:

- (a) receiving each print job with image data;
- (b) storing the received print job into a job storage module that has a capacity of storing multiple print jobs;
- (c) retrieving redundant image data among image data of
20 print jobs stored in said job storage module; and
- (d) leaving at least one of the redundant image data retrieved in said step (c) while deleting the other of the retrieved redundant image data, and setting a status of a print

job in which the image data was deleted, to be executable with remaining image data by the printing device.

13. A print job management method in accordance with claim 12, wherein each print job includes identification
5 information for identifying the image data, and

said step (c) retrieves image data having identical identification information among the image data of the print jobs stored in the job storage module, as the redundant image data.

10 14. A print job management method in accordance with claim 13, wherein the identification information includes at least one of a file name of each image data, a size of the image data, identification information for identifying a digital camera used to record the image data, and date of recording
15 the image data with the digital camera.

15. A print job management method in accordance with claim 12, wherein said step (d) sets the status of the print job in which the image data was deleted, such that the remaining image data among the redundant image data is shared by a print
20 job having the remaining image data and the print job in which the image data was deleted.

16. A print job management method in accordance with claim 15, wherein each print job is executable by the printing

device by utilizing reference data, which is generated for reference to image data of the print job in the process of storage into the job storage module, to read the image data stored in the job storage module, and

5 said step (d) overwrites reference data of the print job in which the image data was deleted, with reference data of a print job having the remaining image data among the redundant image data.

17. A print job management method in accordance with
10 claim 12, wherein said step (d) preferentially deletes image data stored earlier in the job storage module, among the redundant image data.

18. A print job management method in accordance with
15 claim 12, wherein said step (d) preferentially deletes printed image data, among the redundant image data.

19. A print job management method in accordance with claim 12, said print job management method further comprising the step of:

(e) making image data of each print job, which is stored
20 in the job storage module, subjected to a preset series of image processing and thereby converting the image data into print data printable by the printing device,

wherein said step (c) and said step (d) respectively

execute the retrieval and the deletion and setting the status of the print job, while said step (e) is not proceeded.

20. A print job management method in accordance with claim 12, said print job management method further comprising
5 the step of:

(f) deleting a print job stored in the job storage module at a preset timing.